#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024848 Address: 333 Burma Road **Date Inspected:** 09-Jun-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

**CWI Name:** Mr. Shi Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Segment

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT)

This QA inspector witnessed and performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 13AW.

The weld designations reviewed/witnessed are as follows:

- 1. SEG3013F 057, 058, 059, 061, 062, 063, 065, 066
- 2. SEG3013F 067, 069, 070, 071, 073, 074, 075, 077
- 3. SEG3013F 078, 079, 081, 082,085, 086, 087, 089
- 4. SEG3013F 090, 091, 092, 094, 095
- 5. SEG3013D 204, 086, 088, 091, 092, 093, 096, 097
- 6. SEG3013D 098, 101, 102, 103, 106, 107, 108, 111
- 7. SEG3013D 112, 113, 116, 117, 118, 121, 122, 123
- 8. SEG3013D 308, 309, 310

#### **OBG Trial Assembly Yard**



### WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3015U-003 and 004 located on vertical plate to deck panel of OBG Segment 13CW. ZPMC Welder is identified as 068097. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3015H-353 located on vertical plate RS stiffener at panel point 124 to 124.5 of OBG Segment 13CW. ZPMC Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SA3135-006-006, 008 located on side plate connection plate at panel point 122 to 122.5 of OBG Segment 13B/CW. ZPMC Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

SMAW welding of weld joint OBW13C-009, 010 located on of OBG Segment 13B/CW. ZPMC Welder is are identified as 068494, 066239, 200569 and 070432. ZPMC Quality Control (QC) is identified as Mr. She lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-FCM-1.

SMAW) welding of weld joint SEG3015U-003 located on vertical plate to deck panel of OBG Segment 13CW. ZPMC Welder is identified as 067829. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3014S-021 located on vertical plate RS stiffener to floor beam at panel point 122. of OBG Segment 13BW. ZPMC Welder is identified as 066156. ZPMC Quality Control (QC) is identified as Mr. She lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)



## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer